

/ Descriptions

SOT-89 NPN Silicon NPN transistor in a SOT-89 Plastic Package.

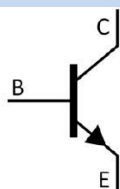
/ Features

P_C , h_{FE} , 9015T
High P_C and h_{FE} excellent h_{FE} linearity, complementary pair with 9015T.

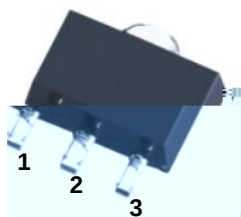
/ Applications

Low frequency, low noise amplifier.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ Marking

h_{FE} Classifications Symbol	A	B	C	D
h_{FE} Range	60 150	100 300	200 600	400 1000
Marking	HJ6A * *	HJ6B * *	HJ6C * *	HJ6D * *

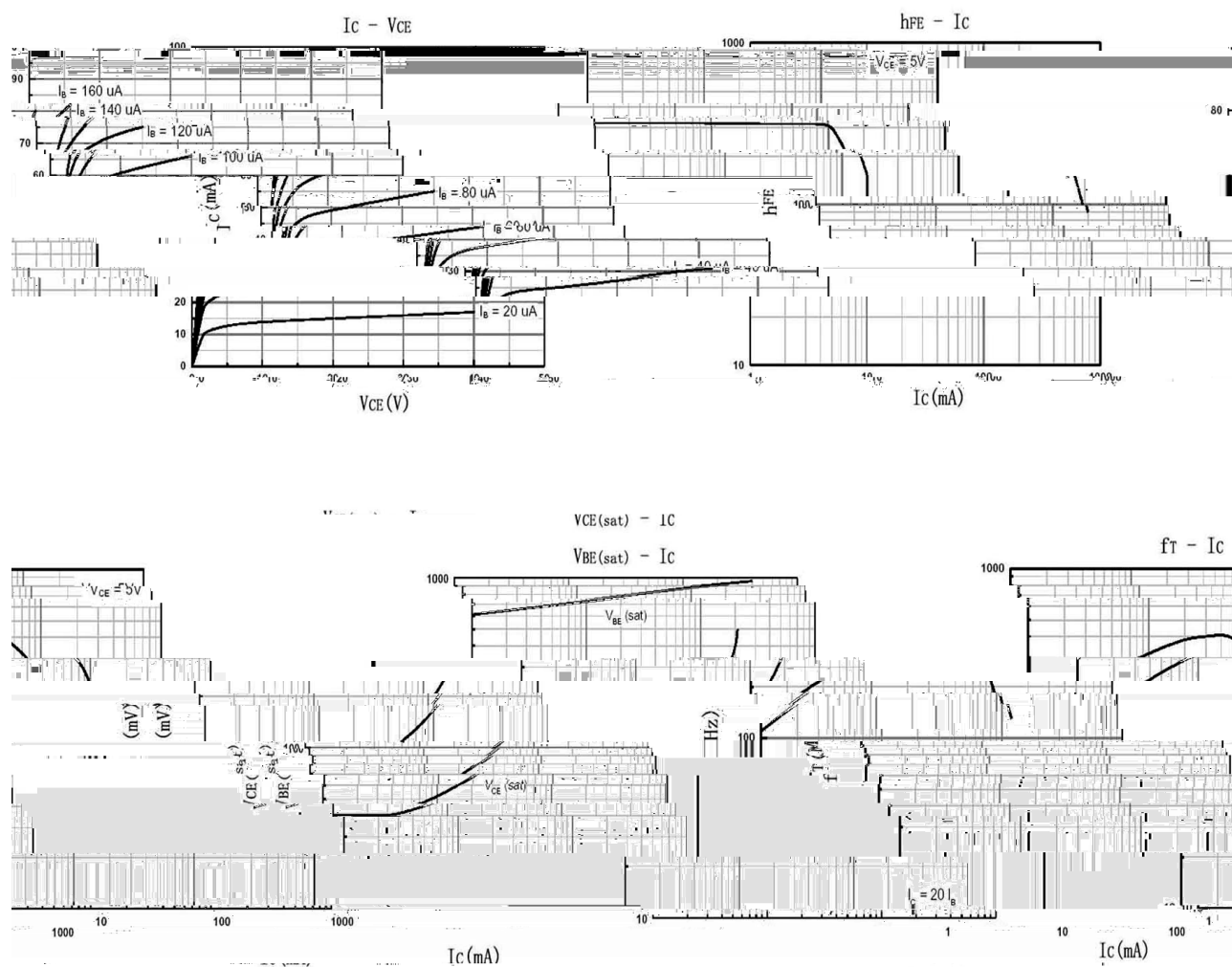
/ Absolute Maximum Ratings(Ta=25 –)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	45	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	100	mA
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25 –)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=0.1mA$ $I_E=0$	50			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0mA$ $I_B=0$	45			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=0.1mA$ $I_C=0$	5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=50V$ $I_E=0$			0.05	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			0.05	μA
DC Current Gain	h_{FE}	$V_{CE}=5.0V$ $I_C=1.0mA$	60		1000	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA$ $I_B=5.0mA$		0.14	0.3	V
Emitter to Base Saturation Voltage	$V_{BE(sat)}$	$I_C=100mA$ $I_B=5.0mA$		0.84	1.0	V
Emitter to Base Voltage	V_{BE}	$V_{CE}=5.0V$ $I_C=2.0mA$		0.63	0.7	V
Transition Frequency	f_T	$V_{CE}=5.0V$ $I_C=10mA$	150	270		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$ $I_E=0$ $f=1.0MHz$		2.2	3.5	pF
Noise Figure	NF	$V_{CE}=5.0V$ $I_C=0.2mA$ $R_g=2.0K\Omega$ $f=1.0KHz$ $f=200Hz$		0.9	10	dB

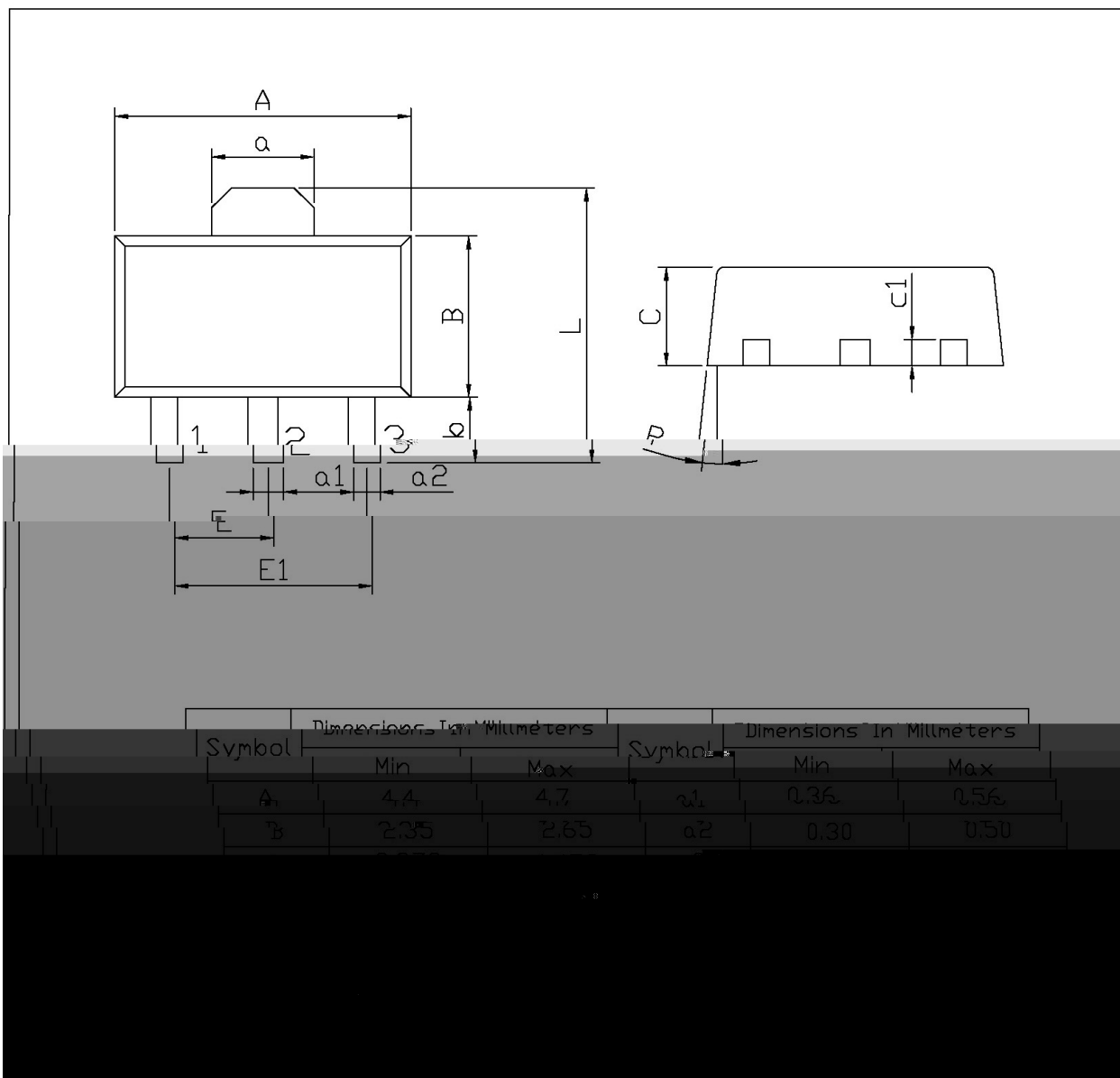
/ Electrical Characteristic Curve



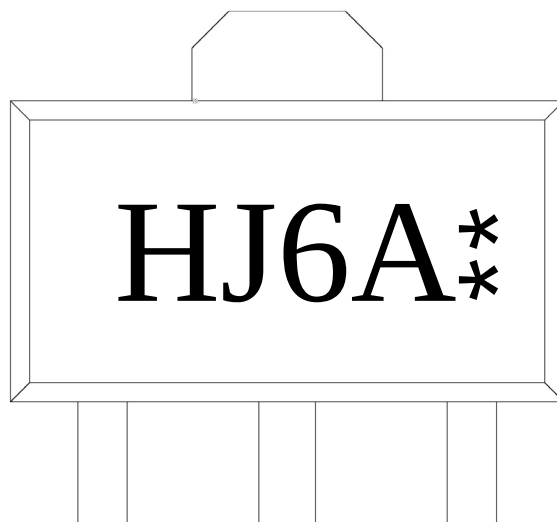
/ Package Dimensions

SOT-89

单位: mm



/ Marking Instructions



H

J6

A: h_{FE}

**

Note:

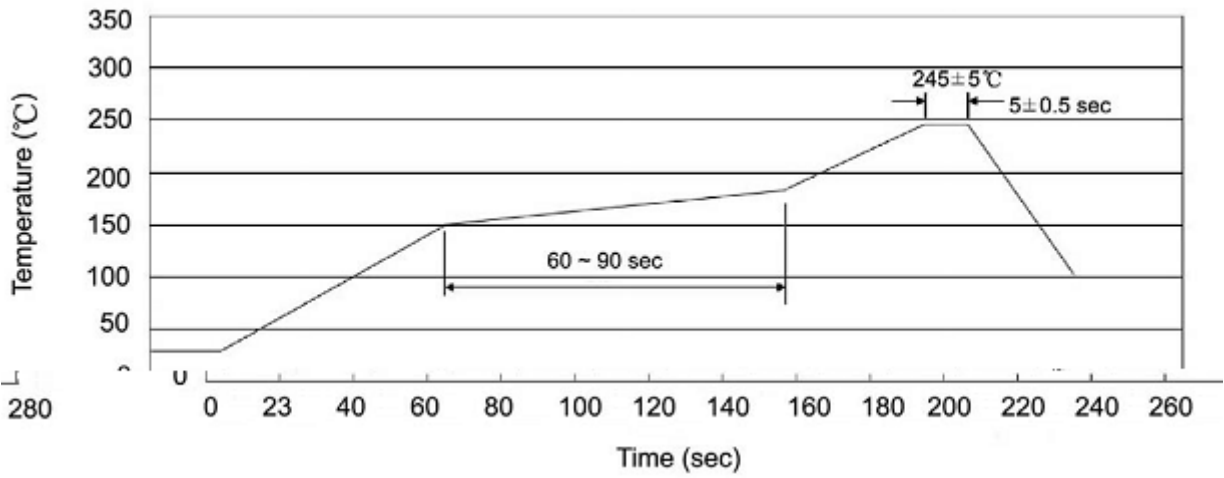
H: Company Code.

J6: Product Type.

A: h_{FE} Classifications Symbol

** : Lot No. Code, code change with Lot No.

() / Whp shudwxuh Suriloh i ru LU Uhior z Vroghulqj+Se0l uhh,



Note:

- | | | | | | |
|---|----|-------|----|-----------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | | 245±5 | | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)	
封装形式	只 卷盘	卷盘 盒	只 盒	盒 箱	只 箱	盒	箱